



Access to and Preferences for Text Messaging for Medical and Insurance Reminders in a Safety Net Population

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INTRODUCTION

The immediate, direct-to-patient nature of text messaging and low cost may help overcome communication barriers between healthcare providers and underserved communities.

- Reminders can increase patient appointment and treatment completion, and is a reliable method of communication even in communities with low literacy.
- Text messaging may offer similar opportunities to reach patients in health care safety net settings who are disproportionately impacted by homelessness or unstable housing, low health literacy and may be lost to follow up.

Preferences for and predictors of text messaging among patients at safety net institutions have not been elucidated.

METHODS

Face-to-face structured interviews (N=793) of patients at emergency departments of three large safety-net hospitals (September 2013-January 2014)

•Inclusion Criteria: Age 18-64; Speak English, Haitian Creole, Spanish or Portuguese; only have one insurance type or are uninsured

•Exclusion Criteria: Severely ill patients

•Response rate of 81%

Survey questions:

- Access to text messaging
- Preferences for text messaging
 - Receiving reminders
 - Over other forms of communication

Analysis:

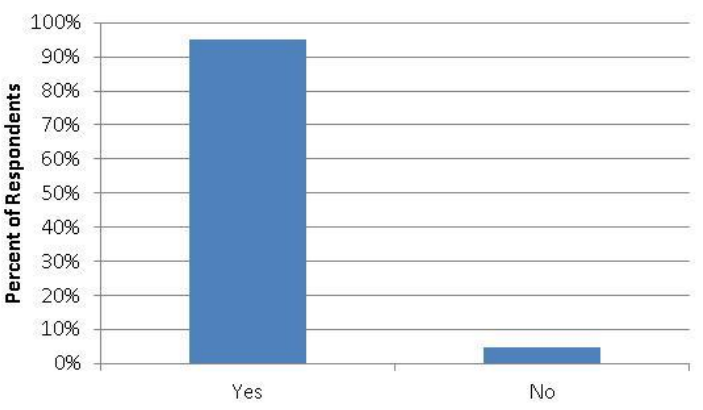
- Multivariable logistic regression models
 - Model 1: age, gender, insurance
 - Model 2: age, gender, insurance, race/ethnicity, immigration status, chronic condition

RESULTS

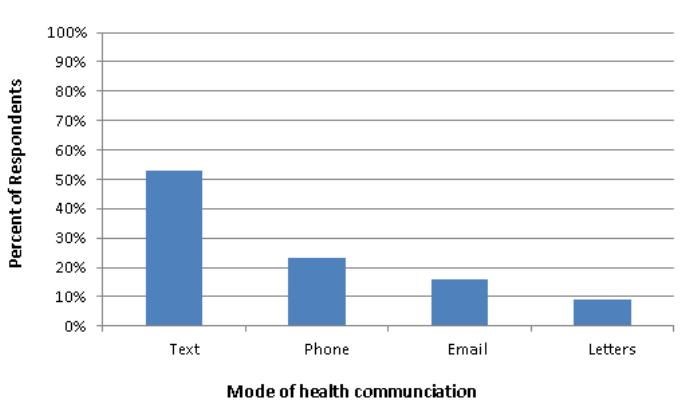
Table 1. Demographics

	N (%)
Male	60
Foreign-born	54
Education ≥ high school	84
Race	
Black, non-Hispanic	15
White, non-Hispanic	44
Hispanic	36
Other	5
Age	
18-30	39
31-45	35
46-65	26
Insurance	
Uninsured	14
Public (Medicaid, Commonwealth Care)	63
Private	23
Annual Income <\$20,000	58
Employed	64
Emergency Severity Index	
2 or 3 (more acute)	53
4 or 5 (less acute)	47
Any Rx since on plan	74
Average monthly rx since on plan ≥ 3	54
No doctors Visits in past year on plan	19
Hospitalization past year	22
Excellent or very good Health status	38

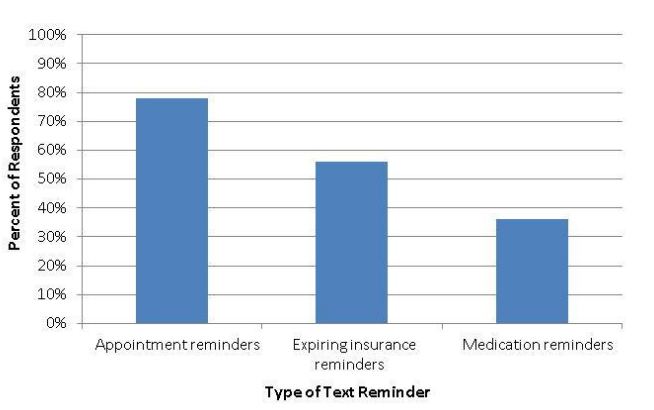
Has daily access to text messaging



Preferred Mode of Health Communication



Preferred Type of Text Reminders



Frequency and reasons for not wanting text messaging

15% of respondents stated they do not want text message reminders

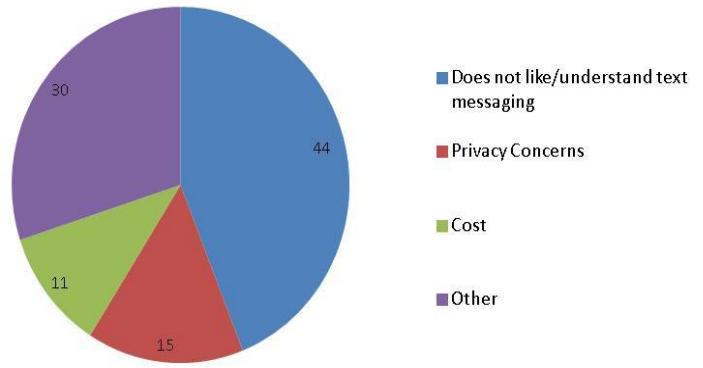


Table 2. Demographic Predictors of Preferences for Text Messaging

	Prefers Text OR (95% CI)	Wants Appointment Reminders OR (95% CI)	Wants Medication Reminders OR (95% CI)	Wants Expiring Insurance Reminders OR (95% CI)
MODEL 1				
Age (ref 18-30)				
31-45	1.27 (0.90-1.80)	1.31 (0.85-2.03)	1.12 (0.79-1.59)	0.89 (0.63-1.26)
46-64	0.84 (0.58-1.20)	0.63 (0.41-0.95)	0.76 (0.52-1.21)	0.60 (0.42-0.86)
Male (ref Female)	0.84 (0.63-1.41)	1.03 (0.71-1.48)	0.84 (0.62-1.14)	1.31 (0.97-1.77)
Insured (ref Uninsured)	1.06 (0.75-1.49)	1.01 (0.67-1.53)	0.89 (0.62-1.26)	0.65 (0.46-0.92)
MODEL 2				
Age (ref 18-30)				
31-45	1.34 (0.94-1.91)	1.24 (0.79-1.96)	1.06 (0.74-1.52)	0.85 (0.60-1.22)
46-64	0.90 (0.62-1.33)	0.60 (0.38-0.93)	0.72 (0.48-1.08)	0.57 (0.39-0.84)
Male (ref Female)	0.88 (0.65-1.19)	1.02 (0.70-1.47)	0.81 (0.59-1.10)	1.25 (0.92-1.70)
Insured (ref Uninsured)	1.02 (0.71-1.46)	0.94 (0.61-1.45)	1.04 (0.72-1.50)	1.29 (0.89-1.86)
Race/Ethnicity (Ref White, non-Hispanic)				
Black, non Hispanic	0.71 (0.45-1.12)	0.67 (0.40-1.13)	1.15 (0.72-1.83)	1.22 (0.77-1.92)
Hispanic	0.81 (0.55-1.20)	1.19 (0.73-1.93)	1.17 (0.79-1.74)	1.60 (1.09-2.37)
Other, non-Hispanic	0.64 (0.33-1.27)	0.46 (0.22-0.97)	0.80 (0.38-1.67)	1.69 (0.83-3.43)
Foreign Born (ref US-born)	0.87 (0.61-1.24)	1.15 (0.75-1.78)	1.26 (0.87-1.82)	1.25 (0.87-1.79)
Chronic Condition (vs none)	0.78 (0.58-1.09)	0.99 (0.68-1.45)	1.09 (0.79-1.51)	1.09 (0.79-1.49)

Bolded items are significant (p<0.05)

CONCLUSIONS

- In a safety net population, the vast majority of patients have access to text messaging.
 - A small minority do not want text messaging.
- A high proportion express preferences for text message reminders over other forms of communication.
- Reminders regarding appointments and expiring insurance were most highly desired.
- Younger age and Hispanic ethnicity are associated with preferences for some text message reminders.

LIMITATIONS

- Single institution, may not be generalizable
- Emergency department setting, may not be representative of outpatient populations

IMPLICATIONS

Text messaging may be a promising method to improve healthcare provider communication with safety net populations in the US, particularly for appointment and expiring insurance reminders and among younger and Hispanic populations.